



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

### PERMIT DETAILS

Area Permit Number: CPS 7800/1  
File Number: DER2017/001745-1  
Duration of Permit: From 28 April 2018 to 28 April 2020

### PERMIT HOLDER

Steven Constantine Varnavides

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 7725 on Deposited Plan 153219

### AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.43 hectares of native vegetation within the area cross-hatched yellow on attached Plan 7800/1.

### CONDITIONS

#### 1. Avoid, minimise and reduce the impacts and extent of clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- (a) avoid the clearing of native vegetation;
- (b) minimise the amount of native vegetation to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

#### 2. Revegetation and rehabilitation

- (a) The Permit Holder must at an *optimal time* plant a minimum of 1,000 stems per hectare of *Eucalyptus diversicolor* (karri) within the areas cross-hatched red on attached Plan 7800/1.
- (b) Within 12 months of undertaking *planting* in accordance with condition 2(a) of this Permit the Permit Holder shall:
  - (i) engage an *environmental specialist* to determine the survival rate of the *Eucalyptus diversicolor* planted in accordance with condition 2(a) of this Permit; and
  - (ii) where in the opinion of an *environmental specialist* the survival rate of the *Eucalyptus diversicolor* determined under condition 2(b)(i) of this Permit will not result in a survival rate of a minimum of 1,000 stems per hectare, undertake additional plantings of *Eucalyptus diversicolor* until a minimum survival rate of 1,000 stems per hectare is achieved.
- (c) Where additional planting of *Eucalyptus diversicolor* is undertaken in accordance with condition 2(b)(ii) of this Permit, the Permit Holder shall repeat condition 2(b)(i) within 12 months of undertaking the additional planting of *Eucalyptus diversicolor*.
- (d) Where there is a determination by an *environmental specialist* that the survival rate of 1,000 stems per hectare of *Eucalyptus diversicolor* is achieved, as determined in condition 2(b)(i) and (ii) of this Permit, that determination shall be submitted for the consideration of the CEO. If the CEO does not agree with the determination made, under condition 2(b)(ii) the CEO may require the Permit Holder to undertake additional planting in accordance with the requirements under condition 2(b)(ii).

### 3. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit, in relation to the clearing of native vegetation authorised under this Permit:

- (a) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
- (b) the date that the area was cleared;
- (c) the size of the area cleared (in hectares);
- (d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 1 of this Permit; and
- (e) details required under condition 2 of this Permit.

### 4. Reporting

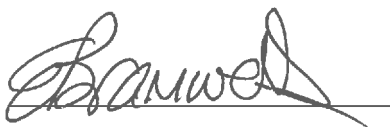
- (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
  - (i) of records required under condition 3 of this Permit; and
  - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.
- (b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this Permit has been carried out, must be provided to the CEO on or before 30 June of each year.

## DEFINITIONS

**environmental specialist:** means a person who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit, or who is approved by the CEO as a suitable environmental specialist.

**optimal time** means the period from April to June; for undertaking *planting*;

**planting** means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;



Emma Bramwell  
A/MANAGER  
CLEARING REGULATION

*Officer delegated under Section 20  
of the Environmental Protection Act 1986*

29 March 2018

# Plan 7800/1

116°0.480'E

116°0.600'E

116°0.720'E

116°0.840'E

34°25.920'S

34°26.040'S

34°26.160'S

34°25.920'S

34°26.040'S

34°26.160'S









116°0.480'E

116°0.600'E

116°0.720'E

116°0.840'E

## Legend

-  Subject to conditions
-  Areas approved to clear
-  Roads
-  cadastre
-  Cadastre
-  WANow\_Imagery



0 50 100 150 200 m



MSA 84  
Geocentric Datum of Australia 1994

*Erin Wells*  
Date 29/03/18  
ERIN WELLS

Officer with delegated authority under Section 20  
of the Environmental Protection Act 1986



GOVERNMENT OF  
WESTERN AUSTRALIA



## 1. Application details

### 1.1. Permit application details

Permit application No.: 7800/1  
Permit type: Area Permit

### 1.2. Applicant details

Applicant's name: Mr Steven Constantine Varnavides  
Application received date: 6 October 2017

### 1.3. Property details

Property: Lot 7725 on Deposited Plan 153219  
Local Government Authority: Shire of Manjimup  
Localities: Channybearup

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.43		Mechanical Removal	Dam construction and maintenance

### 1.5. Decision on application

Decision on Permit Application: Granted  
Decision Date: 29 March 2018  
Reasons for Decision: The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986* (EP Act). This assessment has concluded that the proposed clearing is at variance to clearing principle (f), may be at variance to clearing principle (i), and is not likely to be at variance to the remaining principles.

After consideration of the above, and taking into account the extent of the clearing proposed and the condition of the vegetation within the application area, the Delegated Officer determined that the proposed clearing is unlikely to result in any unacceptable environmental impacts.

## 2. Site Information

<b>Clearing Description</b>	The application is for the clearing of 0.43 hectares of native vegetation within Lot 7725 on Deposited Plan 153219, Channybearup, for the purpose of dam construction and maintenance.
<b>Vegetation Description</b>	<p>The application area is mapped as Lefroy Vegetation Complex: Tall open forest of <i>Eucalyptus diversicolor</i> (tuart) – <i>Corymbia calophylla</i> (marr) on slopes and low woodland of <i>Agonis juniperina</i> – <i>Callistachys lanceolata</i> (wonnich) on lower slopes in hyperhumid and perhumid zones (Mattiske and Havel 1998).</p> <p>The applicant provided photographs of the vegetation within the application area in support of the application (applicant's photographs). The applicant's photographs indicate that the vegetation within the application area comprises a canopy of karri over a mid-storey and understorey comprising native and invasive flora taxa, including <i>Pteridium esculentum</i> (bracken), <i>Hibbertia cuneiformis</i> (cutleaf hibbertia), <i>Melaleuca</i> spp. and <i>Taxandria</i> spp.</p>
<b>Vegetation Condition</b>	<p>Good; Vegetation structure significantly altered by various signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate to it (Keighery 1994).</p> <p>To</p> <p>Degraded; Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management (Keighery 1994).</p> <p>The condition of the vegetation within the application area was determined from a review of the applicant's photographs. The applicant's photographs indicate that the vegetation within the application area is predominantly in Degraded (Keighery, 1994), with some areas in Good condition (Keighery 1994).</p>
<b>Soil/Landform Type</b>	Lefroy Subsystem (Pimelia): Valleys 40 to 60 metres deep with smooth slopes and 10 to 20 degrees of elevation. Narrow terraces. Red gradational soils, not calcareous with some red and brown duplex profiles (Department of Primary Industry and Regional Development 2017).
<b>Comment</b>	The local area referred to in the assessment is defined as the area within a ten kilometre radius of the application area.



**Figure 1: Application area (area cross-hatched blue)**



### **3. Assessment of application against clearing principles**

As indicated in Figure 1, the local area includes large tracts of remnant vegetation, including within the Donnelly State Forest, Big Brook State Forest, Warren State Forest and Gloucester National Park.

A review of available databases identified that four conservation significant flora species have been recorded within the local area (Western Australian Herbarium 1998-). Of these, three species have been recorded from vegetation and soil types similar to those mapped within the application area:

- Rare flora species 1 has been recorded approximately 1.8 kilometres from the application area. This species is known from nine records around Esperance, Albany and south of Manjimup associated with forest or dense mallee (FloraBase website, February 2018). This species is typically a bushy shrub to two metres tall. Noting the extent of the proposed clearing and the condition of the vegetation within the application area, and on review of the vegetation indicated in the applicant's photographs, this species is unlikely to be impacted by the proposed clearing.
- Rare flora species 2 has been recorded approximately 6.6 kilometres from the application area. This species is known from 52 records associated with brown loamy soils in winter-wet areas (FloraBase website, February 2018). Noting the distance to the nearest record and the condition of the vegetation within the application area, this species is unlikely to occur within the application area.
- *Thomasia brachystachys* (Priority 1) has been recorded approximately 7.9 kilometres from the application area. Recorded occurrences of this species are associated with organic brown soils in high, open or dense forests (FloraBase website, February 2018). This species is typically an open upright shrub to 1.5 metres tall. Noting the distance to the nearest record and the condition of the vegetation within the application area, this species is unlikely to occur within the application area.

Noting the extent of the proposed clearing and the condition of the vegetation within the application area, the application area is unlikely to include or be necessary for the continued existence of conservation significant flora species.

A review of available databases identified that 12 conservation significant fauna species occur within the local area (Department of Biodiversity, Conservation and Attractions 2007). Noting the extent of the proposed clearing and the condition of the vegetation within the application area, and that the application area is in close proximity to extensive areas of remnant vegetation within conservation estate, the application area is unlikely to comprise significant habitat for indigenous fauna, including species of conservation significance.

According to available datasets, no threatened or priority ecological communities occur in the local area. Noting the extent of the proposed clearing and the condition of the vegetation within the application area, and that the application area is in close proximity to extensive areas of remnant vegetation mapped as similar type to that found within the application area, the application area is not likely to comprise or be necessary for the maintenance of threatened or priority ecological communities.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001). The mapped vegetation association within the Warren bioregion retains more than the 30 per cent threshold (Government of Western Australia 2017). The Shire of Manjimup retains approximately 84 percent of its pre-European vegetation coverage (Government of Western Australia 2017). On this basis the application area is not likely to be significant as a remnant of native vegetation in an extensively cleared area.

A review of available datasets has determined that a minor non-perennial watercourse is present within the application area. This watercourse is a tributary to another nearby watercourse. On this basis, the proposed clearing will impact on vegetation growing in association with the watercourse, and is at variance to Principle (f). Noting the condition of the vegetation within the application area, the non-perennial nature of the watercourse, and the existing dam established within the watercourse, the proposed clearing is unlikely to significantly impact the ecological values of the watercourse.

The main risk to water resources from the proposed clearing relate to erosion that can result in turbidity and siltation downstream. On this basis the proposed clearing may cause deterioration to the quality of surface water, and may be at variance to Principle (i). Noting the extent of the proposed clearing, impacts to surface water quality are likely to be short-term.

The application area is situated within a land system that is moderately to significantly susceptible to land degradation impacts, including salinity, phosphorous export, water erosion and subsurface compaction (Department of Primary Industry and Regional Development 2017). The application area and its surrounding environment have a low risk of flooding (Department of Primary Industry and Regional Development 2017). Noting the mapped soil type, the extent of the proposed clearing and the condition of the vegetation within the application area, the proposed clearing is unlikely to cause appreciable land degradation, or cause deterioration to the quality of underground water, or cause or exacerbate the incidence or intensity of flooding.

There are several conservation areas in the local area, including the Donnelly State Forest, Big Brook State Forest, Warren State Forest and Gloucester National Park. The closest of these are the Donnelly State Forest and Big Brook State Forest, situated 0.5 kilometres and 0.8 kilometres from the application area respectively. Noting that the application area and these conservation areas are separated by agricultural land, and noting the extent of the proposed clearing, the proposed clearing is unlikely to impact on the environmental values of nearby conservation areas.

Given the above, the proposed clearing is at variance to Principle (f), may be at variance to Principle (i), and is not likely to be at variance to the remaining clearing principles. The proposed clearing is unlikely to result in any unacceptable environmental impacts.

#### **Planning instruments and other relevant matters.**

The application area is situated within the Warren River and Tributaries Surface Water Area as proclaimed under the *Rights in Water and Irrigation Act 1914*. GIS contours and streamline datasets indicates that the waterway over which the application area is located appears to rise on the subject Lot (i.e. spring rights may apply). To confirm the situation and requirements, the applicant is advised to contact the Department of Water and Environmental Regulation (DWER) Manjimup Office licensing section.

The application area is located in a 'Priority Not Assigned' Public Drinking Water Source Area (PDWSA) part of the reserve that is the Lefroy Brook Catchment Area. In accordance with DWER's Water Quality Protection Note No. 25 'Land use compatibility in Public Drinking Water Source Areas' (WQPN 25), this PDWSA is potentially a 'Priority 2 (P2) Classification Area', due to it being zoned 'Rural'. WQPN 25 states that P2 classification areas are managed to ensure that there is no increased risk of water source contamination/pollution, where the guiding principle is risk minimisation.

The main risk to water resources from both the proposed clearing and dam construction relate to erosion that can result in turbidity and siltation downstream. To minimise against this risk, and in accordance with DWER's Water Quality Protection Note No. 53 'Dam construction and operation in rural areas (May 2014)', DWER recommends the following:

- the use of shallow-rooted vegetation cover (such as endemic species of perennial shrubs or grasses on the dam embankments) is encouraged, noting that deep rooted vegetation on the dam wall must be avoided due to the potential for the roots to interfere with the structural integrity of the dam wall; and
- clearing is restricted (if possible) to the dry period of the year when rain is less likely.

The application area is situated within the Warren River Water Reserve, gazetted under the *Country Areas Water Supply Act 1947* (CAWS Act). This catchment has been subject to CAWS Act native vegetation clearing controls since December 1978 to prevent salinisation of water resources. The application area is located within Zone D of the catchment, being a low salinity risk area where DWER policy and guidelines for the CAWS Act provide for the grant of a licence to clear subject to the statutory requirement that 10 per cent of the subject land holding remains uncleared.

DWER's analysis of 2014 aerial imagery of the applicant's land holding indicates that approximately 4.7 per cent (approximately 2.34 hectares) of native vegetation remains on the land holding, and that if a clearing permit were granted the extent would be reduced to approximately 3.8 per cent (approximately 1.91 hectares) would remain, much less than the statutory one tenth requirement under the CAWS Act. Notwithstanding, noting the purpose and extent of the proposed clearing, and consistent with DWER's policy and guidelines for the CAWS Act, the grant of a clearing permit for the application could be considered provided that an area twice the size of the application area is revegetated with local provenance species to mitigate potential impacts to water resources, and to ensure that there is no net reduction in native vegetation cover within the catchment.

To address the requirements under the CAWS Act outlined above, the applicant has agreed to establish 0.86 hectares of deep-rooted native vegetation on the property. This revegetation will be conditioned on the clearing permit.

This clearing permit application was advertised on DWER's website on 31 October 2017 with a 21 day submission period. No public submissions have been received in relation to this application.

No Aboriginal sites of significance have been mapped within the application area.

#### 4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Department of Biodiversity, Conservation and Attractions (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed November 2017.
- Department of Primary Industry and Regional Development (2017). NRInfo Digital Mapping. Department of Primary Industry and Regional Development. Government of Western Australia. URL: <https://maps.agric.wa.gov.au/nrm-info/> (accessed November 2017).
- Government of Western Australia (2016) 2016 State wide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2016. WA Department of Parks and Wildlife, Perth.
- Keighery, B J (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Biodiversity Conservation and Attractions. <http://florabase.dpaw.wa.gov.au/> (Accessed 22-27/11/2017 and February 2018).

#### GIS Databases:

- Aboriginal Sites of Significance
- DBCA tenure
- Hydrography, linear DOW
- IBRA WA (Regions - Sub Regions)
- NWLRA, Extent of Native Vegetation
- Pre-European vegetation
- RIWI Groundwater Area
- SAC Biodatasets – Accessed (December 2017)
- Soils, statewide
- Western Australian Herbarium (December 2017)
- Threatened and Priority Flora (December 2017)